

Title (en)
PROCESS FOR THE PRODUCTION OF ARTIFICIAL LEATHER

Title (de)
VERFAHREN ZUR HERSTELLUNG VON KUNSTLEDER

Title (fr)
PROCEDE DE FABRICATION DE CUIR ARTIFICIEL

Publication
EP 0943726 A4 20090624 (EN)

Application
EP 98945605 A 19981005

Priority
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• JP 28764697 A 19971006

Abstract (en)
[origin: EP0943726A1] Artificial leather can be produced, without using any organic solvent, by coating or impregnating a fibrous base material to be formed into artificial leather with a polymer solution in the form of an aqueous emulsion, in which the polymer exhibits elasticity when it is solidified and adhered to the base material; and then solidifying and adhering or fixed, in the fibrous base material, the polymer solution contained in the base material using a combination of wet heat (using the heat of water vapor) and microwave heating. Therefore, the method is not harmful to the environment and permits the reduction of the degree of migration as compared with the conventional methods in which the solidification and adhesion or fixation are performed by dry heating while making use of hot air. The method also permits the formation of a product having clear voids (contact-free portions) formed between fibers in the fibrous base material and the impregnated polymer, the voids being indispensable to the handling or feeling of the artificial leather. The resulting product further has gas permeability due to the presence of numerous very fine pores formed by the release of water vapor generated during the solidification and adhesion or fixation of the polymer. There is also observed the presence of porous structures in the polymer solidified and adhered or fixed within the fibrous base material. In addition, the method permits the elimination of the shrinking step which is essential for the conventional processing steps and this correspondingly allows the simplification of the production process. Moreover, the method of the invention permits the reduction of the processing time and the improvement of the production efficiency.
<IMAGE>

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Citation (search report)
• [A] GB 2070658 A 19810909 - BOER MUEBOER ES CIPOIPARI KUTA, et al
• [A] US 4332710 A 19820601 - MCCARTNEY JOHN
• See references of WO 9918281A1

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DE ES IT

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EP 0943726 A1 19990922; EP 0943726 A4 20090624; CN 1065012 C 20010425; CN 1241231 A 20000112; ID 27688 A 20010419; JP 3309226 B2 20020729; KR 100337416 B1 20020522; KR 20000069184 A 20001125; TW 420738 B 20010201; US 6274203 B1 20010814; WO 9918281 A1 19990415

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